

Complete Listing of the Claims

This Complete Listing of Claims replaces all prior versions of claims in the subject application.

1. (Original) A method of disinfecting or sterilizing an article comprising the steps of:
placing the article into a chamber;
reducing pressure in the chamber to a first pressure;
introducing a mist comprising a sterilant into the chamber;
diffusing the mist through the chamber into contact with the article; and
wherein the first pressure is below atmospheric pressure and above the vapor pressure of the sterilant whereby to enhance diffusion of the mist throughout the chamber.
2. (Original) A method according to claim 1 wherein the sterilant comprises hydrogen peroxide.
3. (Original) A method according to claim 2 wherein the mist comprises a solution comprising hydrogen peroxide and water.
4. (Original) A method according to claim 1 wherein the first pressure is at least 5 torr below atmospheric pressure.
5. (Original) A method according to claim 4 wherein the first pressure is at least 15 torr below atmospheric pressure.
6. (Original) A method according to claim 4 wherein the first pressure is at least 30 torr below atmospheric pressure.
7. (Original) A method according to claim 1 further comprising sterilizing the article.

8. (Original) A method according to claim 7 sufficiently efficacious to sterilize a stainless steel blade with at least 10^6 *Bacillus stearothermophilus* spores in less than 60 minutes.
9. (Original) A method according to claim 1 wherein the chamber has an interior and the method further comprising sterilizing the interior of chamber
10. (Original) A method according to claim 1 further comprising removing residual sterilant from the chamber.
11. (New) A method of disinfecting or sterilizing an article comprising:
placing the article into a chamber; and
reducing pressure in the chamber to a first pressure to disperse a mist comprising a sterilant throughout the chamber and into contact with the article.
12. (New) The method according to claim 11 wherein the reducing occurs prior to admission of the mist into the chamber.
13. (New) The method according to claim 11 wherein the reducing occurs using a vacuum.
14. (New) The method according to claim 12 wherein the sterilant comprises hydrogen peroxide.
15. (New) The method according to claim 12 wherein the mist comprises a solution comprising hydrogen peroxide and water.
16. (New) The method according to claim 11 wherein the first pressure is at least 5 torr below atmospheric pressure.

17. (New) The method according to claim 11 wherein the first pressure is at least 15 torr below atmospheric pressure.
18. (New) The method according to claim 11 wherein the first pressure is at least 30 torr below atmospheric pressure.
19. (New) The method according to claim 11 wherein once a vacuum is established, the mist is admitted into the chamber.
20. (New) The method according to claim 11 wherein the first pressure is a negative pressure.